



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,150	09/10/2003	Atsushi Ogawa	82478-0600	3027
21611	7590	06/08/2005	EXAMINER	
SNELL & WILMER LLP 1920 MAIN STREET SUITE 1200 IRVINE, CA 92614-7230			SAFAVI, MICHAEL	
			ART UNIT	PAPER NUMBER
			3673	

DATE MAILED: 06/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/659,150

Applicant(s)

OGAWA ET AL.

Examiner

M. Safavi

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over any of Zur, Wu, and Bartlett et al. in view of Larson and further in view of any of Lidow, Forbes, and Blair when further considering Higgins et al. .

Each of Zur, Wu, and Bartlett et al. disclose beds possessing a tilt unit operable to perform a tilting operation including tilting of a longitudinal extent of the bed as well as elevating the upper body and bending the knees.

Larson teaches controlling a parameter of a bed, namely heat, as by utilizing a judgment unit to detect the body temperature of a person and relaying the judgment unit information to a control unit operable to control the temperature of the bed based upon the result of the judgment by the judgment unit, col. 3, line 58 to col. 4, line 2. Larson teaches a relationship between the body temperature and REM sleep, col. 1, lines 52-57.

Each of Lidow, Forbes, and Blair teach effecting an action when any particular sleep period is identified, see for example, the abstracts of each of Lidow, Forbes, and Blair.

Art Unit: 3673

Higgins et al. teaches the tendency for posture positioning change during sleep, col. 1, lines 41-49 while recognizing the various cycles or stages of sleep including REM and deep sleep.

Though Higgins et al. does not specifically recite automatic posture positioning change during sleep one of ordinary skill in the art would extract a desire for such an automatic positioning change without arousing the person at sleep, (i.e., relieving any pressure prior to the pressure affecting the occupant). See particularly, Zur, which desires tilting of the bed to sustain comfort for the occupant. Therefore, to have provided the tilt unit beds of any of Zur, Wu, and Bartlett et al. with a judgment unit to detect any particular stage or cycle of sleep including REM sleep and deep sleep, as well as provide a control unit operable to control the tilting of the bed based upon the result of the judgment, (i.e., indication of particular stage of sleep), by the judgment unit, thus allowing a more continuous sound sleep, would have been obvious to one having ordinary skill in the art at the time the invention was made as taught by Larson when considering any of Lidow, Forbes, and Blair when further considering Higgins et al. Providing for the control unit to prohibit the tilt unit from performing the tilt operation within a predetermined time period from completion of an immediately preceding tilt operation, irrespective of which sleep stage the person is in would have constituted a further obvious expedient to one having ordinary skill in the art at the time the invention was made, particularly in view of the Higgins et al. suggestion that less movement would result in a more sound sleep.

Response to Arguments

Applicant's arguments filed March 14, 2005 have been fully considered but they are not persuasive. Applicant asserts that the "... Office Action has brought together nine references. However, the instant rejection utilizes only four references to propose the combination. In any event, Bartlett et al. does teach elevating the upper body and bending the knees as can be seen between Figs. 1 and 2 of Bartlett et al. Likewise, each of Zur and Wu teach elevating the upper body and bending the knees.

As for the combination of references, one of ordinary skill in the art would extract from the teachings of Larson any of Lidow/Forbes/Blair, and Higgins et al. the suggestion to provide the tilt unit beds of any of Zur, Wu, and Bartlett et al. with a judgment unit to detect any particular stage or cycle of sleep including REM sleep and deep sleep, and to provide a control unit operable to control the tilting of the bed based upon the result of the judgment by the judgment unit. As set forth in the above rejection this would allow a more continuous sound sleep, which is what any of Zur, Wu, Bartlett et al., Larson, and Higgins et al. desire.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

Art Unit: 3673

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Safavi whose telephone number is (571) 272-7046. The examiner can normally be reached on Mon.-Thur., 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on (571) 272-7049. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



M. Safavi
May 25, 2005

MICHAEL SAFAVI
PRIMARY EXAMINER
ART UNIT 354